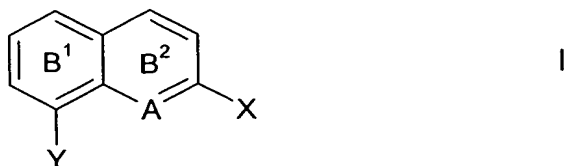


Use of quinaldine and naphthalene derivatives as crystallization modifiers

Abstract

5 The use of compounds of the general formula I

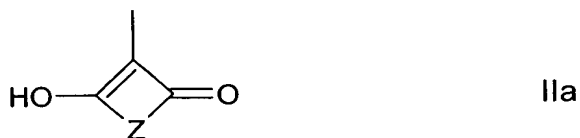


where

10

A is =N- or =CH-;

X when A is =N- is methyl or a radical of the formula IIa



15

or when A is =CH- is an R radical;

Y is an R radical or a radical of the formula IIb

20



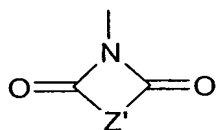
with either X being a radical of the formula IIa or Y being a radical of the formula IIb;

25

R is hydrogen, halogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, -SO<sub>3</sub>H, -SO<sub>3</sub><sup>-</sup> Me<sup>+</sup>, -SO<sub>3</sub><sup>-</sup> N<sup>+</sup>R<sup>1</sup>R<sup>2</sup>R<sup>3</sup>R<sup>4</sup>, -SO<sub>2</sub>NR<sup>1</sup>R<sup>2</sup>, -CH<sub>2</sub>NR<sup>1</sup>R<sup>2</sup>, -CH<sub>2</sub>R<sup>5</sup>, -COOH, -COO<sup>-</sup> N<sup>+</sup>R<sup>1</sup>R<sup>2</sup>R<sup>3</sup>R<sup>4</sup>, -COOR<sup>6</sup> or -COR<sup>6</sup>;

$R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  are each independently hydrogen;  $C_1$ - $C_{22}$ -alkyl or  $C_2$ - $C_{22}$ -alkenyl whose carbon chain may in either case be interrupted by one or more  $-O-$ ,  $-S-$ ,  $-NR^7-$ ,  $-CO-$  or  $-SO_2-$  moieties and/or which may be substituted by one or more of hydroxyl, halogen, aryl,  $C_1$ - $C_4$ -alkoxy and acetyl;  $C_3$ - $C_8$ -cycloalkyl whose carbon skeleton may be interrupted by one or more  $-O-$ ,  $-S-$ ,  $-NR^7-$  or  $-CO-$  moieties and/or which may be substituted by one or more of hydroxyl, halogen, aryl,  $C_1$ - $C_4$ -alkoxy and acetyl; hydroabietyl, abietyl or aryl;  $R^1$  and  $R^2$  or  $R^1$ ,  $R^2$  and  $R^3$  may combine to form a 5- to 7-membered cyclic radical which contains the nitrogen atom and may contain further hetero atoms;

$R^5$  is a radical of the formula IIb'



IIb'

$R^6$  is one of the  $R^1$  alkyl radicals;

$R^7$  is hydrogen or  $C_1$ - $C_4$ -alkyl;

Me is an alkali metal ion;

$Z$  and  $Z'$  are each independently arylene which may be substituted by one or more of halogen,  $-SO_3H$ ,  $-SO_3^- Me^+$ ,  $-SO_3^- N^+R^1R^2R^3R^4$ , and  $C_1$ - $C_{12}$ -alkyl, and

the rings  $B^1$  and  $B^2$  may each be independently additionally substituted by one or more identical or different  $R$  radicals other than hydrogen,

as crystallization modifiers for organic pigments.